

IN THE UNITED STATES PATENT
AND TRADEMARK OFFICE

Applicant(s): Wilsak et al.) Group Art Unit: 1797
Application No.: 10/663,918)
Confirmation No.: 2288)
Filed: August 30, 2005) Examiner: Robert J Popovics
Title: A Solid-Liquid)
Separation Process) Attorney Docket No.: 37512-US

Response to Notification of Non-Compliant Appeal Brief

In response to the Notification of Non-Compliant Appeal Brief mailed on April 5, 2011, the applicants submit herewith a corrected Claims Appendix.

The word "simultaneous" has been added to claim 1 and "simultaneously" has been added to claim 40. Both words were inadvertently left out of the Claims Appendix filed with the Appeal Brief.

The applicants have filed herewith a Petition for a one-month extension of time.

Date: June 6, 2011

Respectfully submitted,



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(viii) Claims appendix

1. A process for separating solids from liquids in a filtration zone defining a higher concentration zone and a lower concentration zone, the zones being separated from one another by a filter, the process comprising the simultaneous steps of:

- (a) flowing a slurry feed comprising a liquid and a solid into the higher concentration zone;
- (b) flowing a displacement fluid to the higher concentration zone countercurrent to the flow of the slurry feed; and
- (c) removing at least a portion of the liquid through the filter to the lower concentration zone;

wherein the displacement fluid is insoluble in the slurry feed components and displaces at least a portion of the liquid from the slurry feed past the filter and into the lower concentration zone to produce a filtrate in the lower concentration zone.

2. The process of claim 1, wherein the displacement fluid is a gas.

5. The process of claim 1, further comprising the step of flowing at least a portion of the displacement fluid from the higher concentration zone through the filter and into the lower concentration zone.

6. The process of claim 2, further comprising the step of flowing at least a portion of the gas from the higher concentration zone through the filter and into the lower concentration zone.

7. The process of claim 1, wherein the slurry feed comprises a product from a crystallization process.
8. The process of claim 2, wherein the slurry feed comprises a product from a crystallization process.
9. The process of claim 7, wherein the slurry feed comprises para-xylene.
10. The process of claim 8, wherein the slurry feed comprises para-xylene.
11. The process of claim 1, wherein the filtrate comprises at least one of ortho-xylene, meta-xylene and para-xylene.
12. The process of claim 2, wherein the filtrate comprises at least one of ortho-xylene, meta-xylene and para-xylene.
13. The process of claim 1, wherein the displacement fluid displaces at least a portion of the liquid from the slurry to form a dense phase in the higher concentration zone.
14. The process of claim 2, wherein the gas displaces at least a portion of the liquid from the slurry to form a dense phase in the higher concentration zone.
15. The process of claim 13, wherein the dense phase comprises a solid packed bed.

16. The process of claim 14, wherein the dense phase comprises a solid packed bed.

40. A solid-liquid separation process comprising simultaneously:

(a) flowing a slurry feed into a hollow cylinder of a filter column comprising the hollow cylinder and at least one filter tube disposed in the hollow cylinder and extending in an axial direction within the hollow cylinder, wherein the at least one filter tube comprises an integrally attached filter, the filter forming a direct connection between an interior of the tube and an interior of the hollow cylinder; and,

(b) directing a displacement fluid insoluble in components of the slurry feed into the hollow cylinder countercurrent to the flow of the slurry feed,

wherein substantial portions of the displacement fluid and liquid in the slurry feed flow through the filter to form a filtrate inside of the at least one filter tube and a dense phase outside of the at least one filter tube.

41. The process of claim 40, wherein the displacement fluid is a gas.

44. The process of claim 40, wherein the slurry feed comprises para-xylene.

45. The process of claim 41, wherein the slurry feed comprises para-xylene.

48. The process of claim 46, wherein the dense phase comprises a solid packed bed.

49. The process of claim 48, wherein at least a portion of the gas passes through at least a portion of the solid packed bed to the filter.